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Lab Laurels
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AFRL inducts five new fellows, recognizes outstanding achievements

by Jill Bohn, AFRL Public Affairs

WRIGHT-PATTERSON AFB, Ohio —The Air Force Research Laboratory has announced five of its members to be recognized as AFRL Fellows.

This year's honorees are:

- Dr. Gordon Hager, Directed Energy Directorate, Kirtland AFB, N.M.
- Dean F. Kocian, Human Effectiveness Directorate, Wright-Patterson AFB, Ohio.
- Dr. Ruth Pachter, Materials and Manufacturing Directorate, Wright-Patterson AFB, Ohio.
- Dr. Stephan D. Price, Space Vehicles Directorate, Hanscom AFB, Mass.
- Dr. Harold Weinstock, Air Force Office of Scientific Research, Arlington, Va.

The five will be honored during the AFRL Fellows induction ceremony banquet October 24 at the United States Air Force Museum.

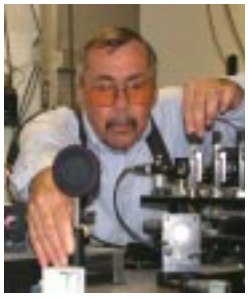
"We are extremely proud of the tremendous work our researchers do every day within the lab to support our Air Force mission," said Maj. Gen. Paul Nielsen, commander of AFRL. "This is our highest award in recognition of technical excellence and outstanding contributions to our research and development programs. These programs guarantee our Air Force will continue to be second to none."

Dr. Hager has been a leader in scientific innovation in the field of high power laser devices and has achieved national and international recognition. His work has been recognized with numerous patents for significant advances in laser technology. Among his accomplishments, he power scaled a subsonic chemical oxygen/iodine laser (COIL) to a record which still stands today; formulated the research program to demonstrate a supersonic COIL; developed a pulsed version of the COIL, which is being evaluated as a potential candidate for Airborne Laser illuminator laser; and demonstrated the first all-gas phase iodine laser.

Kocian is credited with being the Air Force champion of helmet-mounted tracker/display technology (HMT/D) from its early inception. These devices enable pilots to aim weapons using the natural abilities of their heads and eyes to track targets while displaying critical flight and targeting data directly on the visor. He has successfully overcome fundamental technology challenges in the integration of components into an effective, ejection-safe HMD. And he has established a recognized track record of rapport, trust and respect between the AFRL warfighters by tightly coupling their needs and requirements with his specific goals and accomplishments.

Dr. Pachter has established an international reputation in computational chemistry and materials science. Her research contributions established a personal reputation for interaction and Nuclear Magnetic Resonance (NMR) characterization in organic materials, and protein structure determination by using NMR. Dr Pachter's research and development have had a significant impact on laser eye protection, and space and sensor protection applications. Dr. Pachter has defined, led and conducted an extensive basic research activity in the design of novel optical materials for laser protection.

Dr. Price's research has had a profound influence on infrared astronomy and has made major contributions to the Air Force mission. He has been a leader in implementing state-of-the-art sensor and component technology and in the design and conduct of space based experiments. His pioneering, and sustained, contributions to infrared astronomy, space experimentation and numerical analysis have earned him international recognition. His major accomplishments and discoveries including conducting the first infrared surveys of the sky;


Dr. Gordon Hager


Dean F. Kocian


Dr. Ruth Pachter


Dr. Stephan Price


Dr. Harold Weinstock

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defining the Infrared Celestial Backgrounds for military and civilian space based infrared sensors; and creating the Celestial Background Scene Descriptor, a suite of first principal physics based codes that images the celestial background over any user specified area, spectral band and detector size.

Dr. Weinstock is a recognized international expert in the field of superconducting (SQUID). He authored or co-authored over 20 scientific publications, edited or co-edited five books on applications of superconductivity and has been awarded two patents on applications of superconducting magnetometry to nondestructive evaluation (NDE). Some of the research he has sponsored includes a unique method for detection of hidden active corrosion and cracks in aircraft bodies; the fastest, most precise A/D converters in existence; sharp, low-loss electronic filters for secure communication and intelligence; the superconducting materials technology for compact, efficient power generators for DEW and magnets for MHD; and a new class of magnetic materials for power units, bearings and actuators in the More Electric Airplane.

The AFRL Fellows award selection committee considers both military and civilian scientists and engineers, comprising about 55 percent of the AFRL workforce of 5,400. To be eligible, participants must be assigned to AFRL for the past three consecutive years and have at least seven years of active federal service. The work recognized must have been performed at the laboratory or one of its predecessors and meet the following criteria:

- Discovered a factor, theory, etc. of important, fundamental, or of sufficient magnitude to warrant recognition in the scientific or engineering community as a pioneering breakthrough;
- Recognized as a national or international authority in one or more fields, including widespread recognition in the AirForce;
- Sustained high-level achievements in programs of extraordinary importance to AFRL, the Air Force or national defense;
- Continued significant personal contributions to the lab beyond normal expectations;
- Obtained an exceptional record of scientific and technical achievements, creativity and leadership, patents, publishing in referenced publications, organizational skills, and development of lab programs.

"We are pleased to welcome our newest fellows," Nielsen said. "They are scientifically accomplished leaders in the science and engineering arena as is evidenced by their imagination and foresight in their field of study." **@**